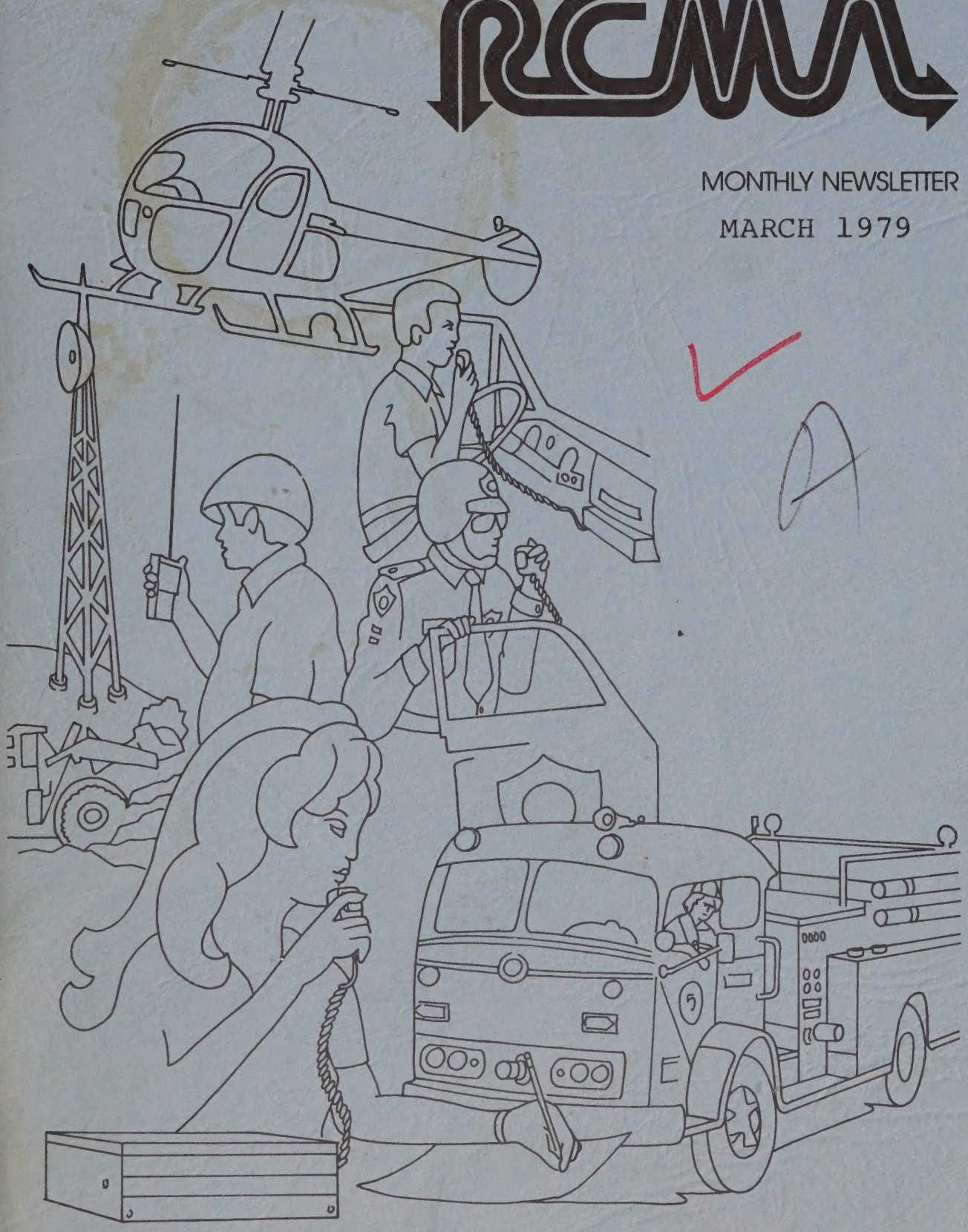
RCMA

MONTHLY NEWSLETTER

MARCH 1979



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The RCMA Newsletter is published monthly by the members of the RADIO COMMUNICATIONS MONITORING ASSOCIATION, Post Office Box 4563, Anaheim, California 92803. Subscription rate/membership fee is $6.00 per year for US and Canadian residents; $14.00 for overseas residents. Information contained herein is primarily obtained from members and does not necessarily present the position or reflect the opinion of the RCMA as a whole. Reproduction of any material in this Newsletter is authorized providing the source is given credit (this excludes direct photocopying). THE BAY AREA SCANNERS CLUB is specifically welcome to use material from the RCMA Newsletter. MAR. 1979 ISSUE 3 VOLUME V COPY NO. XXX.

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MESSAGE FROM THE PRESIDENT

Well, this is my last President's Message (for a while at least), and I would like to thank everyone who has worked with me through these past two years. I would also like to thank those special people that gave just a little bit more of themselves than expected. These people know who they are!! Please continue your cooperation with the newly-elected Board and support them in any way you can.

There are a few members, however, for whom it is hard to find words to express my appreciation. One such member, Don Jones, has enlightened RCMA in many ways. During the past several months, he has served as our Newsletter Editor, and I strongly feel that our recent Newsletters have been the best RCMA has ever seen. Unfortunately, due to a change in Don's employment, he must resign from his post. I'm sure you will want to join me in thanking Don, and his wife Dorothy, for a job well done! Since this is Don's last Newsletter, someone will have to fill this position real soon. If you have any interest, please step forward today!

Last month, the guest speaker at our meeting was Joe Merdler, a lawyer with the Personal Communications Foundation. Thank you, Joe, for your talk and for clarifying some of the legal "dark spots" in our hobby. Also, Dr. Bob Beck (CA-LA-029) brought us up to date on the ELM Russian Woodpecker signals and his recent efforts to convince officials in Washington of their reality. While in Washington, he demonstrated the effectiveness of his simple, low-cost detection system.

At the last meeting, I made an incorrect announcement when I indicated that Gene Hughes would be speaking at our March meeting -- instead, he will be with us for our April meeting. The March meeting will feature some special scrambler equipment.

Thank you again for your support -- I have enjoyed being your President!

DAVE (CA-LA-001)

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C A L E N D A R

MONTH DATE	DAY TIME	TYPE MTG. SCHEDULED	ORGANIZATION LOCATION
MAR. 16	FRI. 8:00 PM	MONTHLY 3rd FRI.	RADIO COMMUNICATIONS MONITORING ASSOCIATION. MERCURY SAVINGS & LOAN VALLEY VIEW ST/LINCOLN AVE., BUENA PARK, CA.
MAR. 21	WED. 7:30 PM	MONTHLY 3rd WED.	BAY AREA SCANNERS CLUB BERESFORD RECREATIONAL CENTER 27th/ALAMEDA DE LAS PULGAS, SAN MATEO, CA.
APR. 6	FRI. 7:30 PM	MONTHLY 1st FRI.	RADIO COMMUNICATIONS MONITORING ASSOCIATION SAN DIEGO CHAPTER, SKIP SANDERS' HOME 2129 CROWNHILL RD., SAN DIEGO, CA.

EDITORIAL COMMENTS

Another Newsletter Editor is "biting the dust" -- at least as far as being Chief Editor. Bet you're thinking "he sure didn't last long". Well, you're right, but I think I have a fairly good alibi. By the time you receive this Newsletter, I will have fled the scene -- onto new horizons. At least, I'm hoping I can see the horizons better in my new location than here in "Smogsville".

If all this rhetoric doesn't make much sense, I'll put it in plain and simple language -- I've accepted a new job in Santa Barbara County, which (for those of you non-Californians) is too far away from RCMA's home base in Orange County to make it practical for me to continue as Newsletter Editor. I'm giving up the editorship with mixed emotions -- sad because I'll be losing the every-day close contact with so many of you, but somewhat relieved of a job that never seems to end. I must say that it has been an interesting experience. As indicated several months ago, "editing" is not particularly my "thing", but I decided to give it a try. I have to admit that there is a certain element of "accomplishment" as each issue finally goes to print. And, it is always gratifying to receive communications from members indicating their satisfaction with the Newsletter, as well as letters offering constructive criticism. Course, there are always the occasional unhappy malcontent individuals who do not offer anything of a constructive nature!

By way of "thanks", I want to acknowledge the tremendous assistance provided by Technical Editor Chuck Smith -- he's been extremely dependable and has really taken a "load" off my back for the past few months. You will notice that there is no "Technical Column", per se, in this month's Newsletter -- that's because Chuck has been out of town on business for the past two weeks. I'm sure he'll make up for it next month.

Also, you readers are to be commended -- it used to be that the Newsletter staff literally begged members to submit written material. Lately, however, we are pleased to say that members are regularly contributing towards our effort -- thanks to all of you!!

Appreciation is also in order for the RCMA Board -- each member has been easy to work with, and the group has been quite cooperative and supportive.

What's in store for future Newsletters??? Hopefully, you are interested in the future of your monthly bulletin and will seriously consider the article written by IDEN ROGERS (CA-RI-001), printed elsewhere in this issue. IDEN has agreed to coordinate compilation of the next few issues until a new Chief Editor can be recruited. He has some real "organized" suggestions -- now its up to you!!!!!

As far as my future personal contributions to RCMA, I'm hoping to provide assistance as FACT SHEET Coordinator/Editor, or possibly Club Librarian/Historian. I can't take credit for originating the idea of FACT SHEETS, those illusive documents you've been hearing about for the past year or so, but I do feel a real need can be met through periodic printing of information which is either too lengthy to publish in the Newsletter, or is only of interest to a limited number of individuals. The concept is that FACT SHEETS would normally be distributed only upon an individual's request and for a nominal charge. One key to a successful FACT SHEET program will be periodic publication of an Index of available fact sheets. Course its up to the Board to decide if they want me to participate in this area, so I shouldn't be making too many assumptions at this time.

Speaking of the Board -- don't forget to mail in your ballot for the 1979 Officers. The last day they can arrive at the RCMA Post Office Box is Monday, March 19th -- which isn't terribly far away.

Well, I guess I've rambled long enough -- its kind of hard to realize that this is really my last "editorial" -- from now on my comments will end up on the "CORRESPONDENCE" page (that is if they are acceptable to the Editor!!). One good thing about not being the editor any more -- maybe I'll have some time for monitoring!!! 10-98, 10-7.

DON

IMPORTANT NOTICE REGARDING NEWSLETTER:

Don, our present Newsletter Editor who has been doing a great job, has accepted new employment in another city and will be giving up his editorship.

A few of us will try to keep things going until a new Editor is found. If you live in Southern California and would like to be considered for the job (all volunteer work, of course), please call Jerry at 714-772-1259, Karl at 714-772-5451, or Iden at 714-688-1168.

Our Club is continuing to grow at a healthy rate, but with increasing membership, the Newsletter is more of a job to publish. The editing and preparation for printing has been a one-man job, but it has grown to an extent that it is now too much work for one person. A number of the other clubs belonging to the Association of North American Radio Clubs use several editors in a system that proves to be quite workable. The editors can be widely separated geographically with no problems. A managing editor coordinates the efforts of the subject or column editors, organizes the copy that they send to him and makes the final preparations before the publication is sent to the printer. Each subject or column editor is responsible for submitting to the managing editor a monthly column, typewritten and photo-ready. Members send stories, articles, information, etc. directly to the appropriate editor who covers that particular subject. All the addresses of the various editors are printed each month. With each editor using a different typewriter,a number of type styles and type sizes would result. This would add an individual touch for each of the columns and not be a problem as long as all the editors maintain a certain pre-determined column width when typing. Page length would be of no consequence. Editors would have the freedom to design the artwork as a heading for their column if they choose to do so.

The following is a suggested list of subjects or columns, each requiring an editor. It may not be complete and the exact names of the columns certainly do not have to be identical to those suggested.

Frequency column: Editing this column would consist of: (1) Looking over and evaluating the frequency information sent in by members, (2) Discarding frequencies that already appear in "Police Call", "Airport/Facility Directory", and "IFR Supplement", (3) organizing the remainder and typing it up like or similar to the way it is done now, (4) designing, as necessary, and submitting frequency reporting forms to be included in the Newsletter from time to time. The editor of this column must be knowledgeable about FCC frequency allocations, radio system fundamentals, and be rather meticulous.

Technical: We presently are fortunate to have a competent technical editor who (1) writes technical articles, and (2) evaluates technical articles, equipment reviews, etc. sent in by others and puts the usable ones in good order before sending them to the Newsletter.

Monitoring and the Law: The editor of this column should have a keen interest in the legal aspects of monitoring and be willing to maintain a collection of all the laws affecting our hobby that are brought to his attention. He would receive all monitoring law questions, answer those he can via the Newsletter, and print those he cannot answer. He would prepare for the Newsletter all appropriate and acceptable submissions sent to him on any subject relating to monitoring laws, legal developments, or court cases relating to monitoring. This column possibly would not appear each month since material for it might not be submitted each month.

Want Ads: The editor would (1) receive all ads submitted by RCMA members for items wanted and items for sale and prepare finished copy for the Newsletter, (2) have to keep an eye out for and reject any commercial advertising since only items of personal property related to monitoring could be advertised in the column, (3) have to keep track of each ad printed since each would run for two issues, and (4) have to be an accurate typist since many model numbers, frequencies, phone numbers, and addresses are involved. (Continued on Next Page)

IMPORTANT NOTICE REGARDING NEWSLETTER (Continued)

Radio systems around the country: This column would consist of articles describing (1) major changes in existing radio systems, (2) dispatch areas, (3) unit numbering systems, (4) radio codes, (5) receiver, transmitter and repeater locations, an example of which could be an article on the U.S. Forest Service in a particular area including all the link frequencies, repeater input and output frequencies, in other words --- how the whole system is tied together. The editor of this column would have to be knowledgeable about modern radio systems and be able to explain specific systems and system details in an easy-to-understand manner and include system block diagrams when required.

Information Exchange: The editor of this column (1) would have to prepare for the Newsletter questions relating to monitoring submitted by members, (2) should be somewhat of an experienced monitor listener so that some questions could be answered on the spot in the Newsletter, (3) would have to prepare the answers submitted by members to questions appearing in previous issues, (4) would have to keep track of the times each member's question is printed since it should run two issues if unanswered after the first printing (possibly certain questions should run longer depending on the potential interest of the answer to members), (5) would, in some cases, forward questions to other appropriate editors.

Correspondence: The editor (1) must live in Orange County, California, in order to be in close touch with those who receive mail at the Anaheim P.O. Box, (2) must be able to decipher and evaluate the great variety of miscellaneous comments, stories, etc. that are sent to the club, and prepare for the Newsletter those that pass his inspection, (3) must have broad interests in monitoring and/or be quite sensitive to the content of a variety of incoming material (some of which appears on membership applications) so that nothing is passed over when it really deserves to be printed, (4) would receive his material from the club Secretary via the club's Anaheim P.O. Box.

Low Band Skip: Including or not including this column might be an issue in itself since some members are anti-skip and others really enjoy it. Personally, I feel it should be included and those who aren't turned by skip can skip over the column while permitting those who enjoy it to have a place to read about it and a place to submit their reception reports. A low band skip editor (1) must understand skip propogation, sunspot cycles, WWV propogation reports, etc., (2) must be able to devise a reporting format for members to use, (3) must be able to organize and prepare finished copy of skip loggings submitted by members, (4) must himself be a somewhat experienced low band DX enthusiast.

Aircraft: Aircraft listening deserves to have its own editor, though the column might not be monthly. It would depend on members participation in sending in material, but the column would leave a lot of freedom to write instructive or explanatory articles on the subject. Such an editor would have to (1) be an experienced aircraft communications listener, preferably with VHF and UHF equipment, and ideally with HF SSB equipment, (2) understand the various phases of flight and the various air traffic controllers' functions, (3) understand aircraft radio and aircraft flight terminology, (4) be familiar with the various pilots' publications and aeronautical charts, (5) understand basic navigation and how the various radio navaids are used.

The Managing Editor (for lack of a better term) (1) should not have to retype anything that is sent to him by a column editor, and if something is unacceptable, it should be sent back to the column editor for reworking, (2) should be able to recognize spelling and grammatical errors in order to keep up the level of the Newsletter, (3) should be one of the club's three representatives to the Associationof North American Radio Clubs since this would entitle him to a free copy of the ANARC Newsletter to which he should have first hand access in order to print items of interest from that publication (it is our obligation as an ANARC member club to print certain items from the ANARC Newsletter). (Continued next page)

Anyone who cares to respond to this request for assistance please send a typewritten letter to the following address, telling a little about yourself, your monitoring background, and your editing interests. If you do not want to be an editor but have suggestions concerning RCMA Newsletter policy or procedures, also please write to RCMA, P.O. Box 4693, Riverside, CA 92514. (NOTE: This address is temporarily to be used just for Newsletter organizing efforts. The regular RCMA P.O. Box in Anaheim is still in effect as usual for other RCMA business.)

IDEN (CA-RI-001)

BEARCAT 4/6 HAND-HELD 4-BAND 6-CHANNEL SCANNER

Bearcat has made a major breakthrough in hand-held scanners -- the BC 4/6. Only slightly bigger than conventional hand-helds, the BC 4/6 packs two more channels and all-band reception capabilities into the unit.

The unit is nicely put together. The single antenna is a blessing, as far as convenience is concerned. Performance is good, although a compromise. No case is provided, but it does have an earphone.

One of the nicest features is an individual channel lockout. You can listen to any 1, 2, 3, 4, 5, or 6 channel combinations at a time. The other noticeable difference -- no scan delay -- had me worried at first. But in actual use, it proves to be efficient. After all, there is only a "second-half" to a transmission half the time, right?

Reception and audio are generally good. The squelch control is "backwards" for those who have not used other late Bearcat products.

Overall, I would rate the BC 4/6 as an excellent scanner. It is certainly a breakthrough in true mobile monitoring.

JEFF (CA-OR-012)

LOW BAND SKIP (OCT., NOV., DEC. 1978)

A most interesting article on sunspot activity can be found in the November 1978 issue of CB Magazine. Although primarily oriented toward 27 MHz frequencies, an interesting conclusion can be drawn toward monitoring activities in the VHF low bands (30-50 MHz). We monitoring enthusiasts had better prepare for some interesting "low-band" skip activity -- especially during the period 1979-1984.

Referring to the sunspot activity article (above), my reception of the CHP coincided with the solar flare observed around 7-11-78. "F2" skip is occurring here at this location regularly during the daylight hours (Oct.). Signals from Latin America are being observed on 39 MHz and 42 MHz police frequencies. Also being observed on several different frequencies is a "howl" (results when hundreds of different signals are being mixed together at once in the "F2" ionospheric layer.)

Placer Co., CA (Tahoe City) repeater KYG 734 was heard here on the "Police Call" listed frequency 39.680 MHz at 1215-1245 CST on 11-4-78. The frequency differs from the RCMA listed frequency of 39.640.

There hasn't been much "skip" activity here recently (Dec.), but the heavy snowfalls we've received here have usually been preceded by a short period of E-skip from southwestern KS. (Snowstorms have been tracking through that area in a northeasterly direction before reaching Northern IL). When the storm comes out of the West or Northwest, a period of "skip" from Kansas to Nebraska to Montana occurs from 12 to 24 hours prior to the storm's arrival in Northern Illinois.

JOHN (IL-012)

TIPS FOR MONITORING THE ILLINOIS STATE POLICE

The frequencies given have been monitored by this author, with few exceptions.

All listeners should be equipped with frequencies 42.50/155.46 and 154.68, in addition to the individual district frequencies to be monitored. 42.50 is used for emergency weather bulletins, as a back-up frequency, and for communication with rural county and local units transmitting on 39.50. 155.46 is used for communication with Department of Law Enforcement units, ambulances operating on "mercy frequency" 155.34, state executive and federal government units, and also as a back-up or utility frequency.

The National Law Enforcement Emergency Frequency (NLEEF) 155.475 is being implemented. As of November 1978, the northern 40% of statewide area, that encompasses about 65% of the state's police cars, have made the change (about 2,000 state and 4,000 locals will be switched).

The Illinois State Police Emergency Radio Network (ISPERN) 154.68 will then be used as a back-up or secondary emergency frequency (after 12/31/78).

Almost all mobile units use three-digit "activity codes (for computer purposes) to supplement or replace the 10-codes.

The "districts" are split up on a county-by-county basis (Exception: District 3 covers northern half of Cook County; District 4 covers the Southern half of Cook County; and District 15 covers the toll roads only).

Base-base communication with local and county departments is via inter-system frequencies 39.46 and 155.37.

Most state police district base stations transmit on 154.905 to Department of Law Enforcement units. Conversion to 154.905 as the dispatch frequency (from the listed frequencies of 154.695 and 154.79, and the functional district frequencies) is being completed on a district-to-district basis. When 154.905 is not in use, one should try 155.46 to get results. (NOTE: Units in the metropolitan Chicago area are dispatched from a central location on 154.905, but units in outlying areas are dispatched from Elgin or Joliet on 155.46.

Illinois State Police airplane (L7) that covers the northern third of Illinois, is equipped with at least three radios: (1) Aircraft band radio (of course), (2) VHF High Band radio w/154.68 (ISPERN) and 155.46 (Channel 7 or HF 4.) New emergency frequency (155.475) will probably be installed. (3) VHF low band radio w/42.50 (State car-car) and functional district frequencies for Dists. 1, 2, 5, 5A, 6, 6A, 7, 16, and Districts 9 and 15 Car-Car.

Airborne opeations (stop watches used to compute speed over a measured distance) are generally conducted over 42.50 (or 155.46) with exception on the toll roads (Dist 15), where 42.66 is now used in place of 42.50. NOTE: When the airplane is at or near the Rockford area, tollroads or otherwise - there is a good chance that "L7" may be heard up in Minnesota where frequencies 42.50 and 42.66 are in use by their State Patrol.

JOHN (IL-012)

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REMINDER TO ALL CLUB MEMBERS:

D O N'T F O R G E T. . . . Voted ballots for the 1979 Club Officers must be returned no later than Monday, March 19th. If you haven't yet returned your voted ballot, either bring it to the March Club Meeting or mail it to the RCMA Post Office Box.

FANON / COURIER BM8HLU
8 CHANNEL SCANNER

I have been using a Fanon BM8-HLU scanner in my vehicle for the past year. I have found it to be an ideal scanner for mobile use. Its size (1½"H x 5"W x 7"D) is very compact and fits almost anywhere. Front panel controls are easily accessable and provide simple operation for the mobile operator.

While I found the unit to be well suited for mobile operation, I made a few minor changes to the circuit to meet my own personal monitoring requirements.

First of all, I can't stand a slow scan rate. The scan rate on the unit as it comes from the factory is a nominal 12 to 15 channels per second. It seems to take forever for a unit with this slow scan action to go from channel one to channel eight. I like a fast scan rate (like that provided by Bearcat), so that no words are missed at the beginning of a conversation. Speeding up the scan rate was an easy matter. This was accomplished by changing the value of resistor R516 from 33K ohms to 10K ohms. The resistor is connected to the base of transistor Q507. This resulted in a scan rate of app. 25 - 30 channels per second.(Much better).

Another feature of the BM8-HLU that was not to my liking was the "built-in" scan delay. There are a couple of services in the area that use split channel communications and there is a lot of cross-band/cross-channel monitoring done by local law enforcement agencies. The scan delay feature can give you a real headache when trying to listen to this type of communication. Parts of sentences and much information is missed because of it. Disabling this feature was not a difficult task. By simply removing electrolytic capacitor C512, the delay is eliminated. If you want this function to be optional to you, the operator, lift the negative side of C512 from the board and place a SPST switch between the negative side of the cap and ground. Now you can switch the delay in or out as you wish.

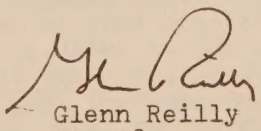
I also found that the audio quality could be improved. Fanon places a .04 mf ceramic cap across the speaker terminals. It didn't really seem to do much to reduce the background hiss during a received transmission. I clipped this cap from the speaker terminals and soldered it across the volume control (two outside terminals). This really improved the audio quality; it eliminated alot of the high frequency hiss and gave the unit a more bassy professional sound.

As a final note, the BM8-HLU has a band-width of 7 Mhz (6 db down) for the low-band. Since the factory alignment is for a center frequency of 39 Mhz, you should align the low band RF stages for the portion of the band you are most interested in. Most of the signals in our area are from 44.5 to 47.5 Mhz. Hence, I center tuned the unit to 46.0 Mhz. Sensitivity was better than .4 microvolts per 20 db quieting. You should use an on-frequency r f signal generator using only enough signal to reasonably quiet the receiver.

Using the 1 volt scale on an AC voltmeter, connect the meter leads across the speaker leads. Tune coils L101, L104, L105, and L106 (in that order) for minimum meter reading (maximum quieting). Reduce the signal generator output as the adjustments are made to the minimum usable output.

After customizing my unit as outlined above, I have found the BM8-HLU to be an excellent mobile scanner. If anyone out there has a BM8-HLU, you may want to try some of these modifications. If your looking for a good mobile crystal scanner, this is it!

HAPPY MONITORING!!



Glenn Reilly
NJ-008

RADIO COMMUNICATIONS OF THE CALIFORNIA OFFICE OF EMERGENCY SERVICES

The OES has the responsibility of disaster assistance coordination in California. Basically, the State is divided into six regions, with an office in most regions. OES also provides the fire departments with 100 1,000 GPM triple-combination pumpers which are moved throughout the State in the form of task forces which usually consist of five engines, a gas or diesel fuel truck, and a commander usually a battalion chief.

OES routine communications are usually heard on 153.755 MHz, which operates in both simplex and repeater modes. The control is 154.980 for the repeater mode. However, in Sacramento, some members of the planning, and fire and rescue divisions talk simplex on 154.980 with 10-watt portable units. The 153.755 is referred to as the local government radio system.

Usually, each work day, this system is tested at approximately 1030 hours. OES Sacramento can be heard calling OES LA, OES Concord, OES Redding, and OES Fresno. Currently there are twenty mountain-top mobile relays in-service for this net.

Also, OES operates two fire nets which can be heard statewide. Channel one repeater operates on 154.160 and is linked with the state microwave system. Thus, one agency on the net can contact another agency. Its control is 33.980. Net two has a repeater on 154.220 and its control i s 33.660. Generally speaking, net two is used only in limited areas and is not used for statewide communications. Again, each workday usually brings a radio test on both of these frequency pairs. All OES pumpers are equipped with both nets.

OES also operates five mobile communications vans which augment the OES radio system. These are called COMSTAT units and are housed by various fire departments throughout the State. These vans are well-equipped with radio equipment and include the White channel (154.280) and many local fire frequencies for the region to which the van is assigned. It should be noted that OES is starting the use of synthesized two-way radio equipment. This will permit even greater flexibility when it comes to communications.

Inside the main building in Sacramento is a room approximately 70 x 20, which contains the main communications center for OES. The main console contains the OES LG, Fire Nets, CLERS, AWAS, CALWAS, and direct microwave nets. AWAS and CALWAS are warning systems for major natural disasters and war. The room also contains the HF disaster nets, teletype including CLETS, as well as radios for DOJ and CLEMARS.

In addition to each regional office, there is a backup Emergency Operating Center for each region and the Sacramento headquarters.

BOB (CA-YO-001)

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TAPE-RECORDING FROM YOUR BC-250

Have you ever wanted to start making tape recordings of what you hear on your BC-250, and after hooking up the remote and mic cords to your cassette recorder all you got was a noisy recording???

Chances are your cassette recorder uses high-impedence input (10,000 - 20,000 ohms), while the BC-250 has low-impedence (8 ohms) output through its rear jacks. Since Electra didn't consider giving us low- and high-impedence jacks, you have to solve the problem. The solution is quite simple -- just buy an audio transformer to convert 8 ohms to 10,000 or 20,000 ohms (check your tape recorder manual). Follow the directions carefully during hook-up. The easiest way is to splice the transformer into the middle of your mic cable. HAPPY RECORDING!!

JEFF (CA-OR-012)

MONITORING THE WEATHER

Since the interests of many of our monitoring enthusiasts are as varied as the weather itself, it seems only natural to discuss the possibilities for using the monitor receiver for reception of urgent or new developments in weather conditions.

In the winter, in those areas like Missouri that are plagued by several months of ice and snow, I have found that weather forecasts and conditions expected can be retrieved from monitoring the highway maintenance frequencies. These entities must have up-to-the-minute weather information to plan for deployment of street maintenance crews, and the information gathered by them and disseminated over radio channels is much more detailed than that received from conventional sources. In St.Louis City, this information may be heard over the Street Department Maintenance channel: 156.180 KEX490; In St. Louis County, its the Department of Highways and Traffic: 151.100 KBW985; and on State maintained and interstate highways in St. Louis and the surrounding counties, the State Highway Department operates on 151.040 KFN618/KC6343. All of these stations operate repeaters. Frequent highway conditions are also given during periods of severe winter weather which would make these frequencies a "must" for anyone traveling through this area during winter months.

Of course, the regular broadcasts of the National Weather Service give reasonable coverage to both winter snow and ice storms and summer thunderstorm and tornado watches on KDO-89, 162.550, St. Louis; WXK82, 162.475, Hannibal/Quincy; and WXJ75, 162.400, Springfield, Illinois. Urgent weather bulletins are broadcast with tone activation for monitors so equipped. The tone frequency is 1050 Hz. for urgent messages, and I understand the tone of 1650 Hz. will be used for 'forecast updates.'

Most state patrol or state police agencies under their responsibilities as state warning dissemination centers also broadcast severe weather alerts. In Missouri, such information may be gathered as broadcast from the Missouri State Patrol, 42.060 or 42.120 MHz. In Illinois, tone-activated broadcasts are aired over 42.500 MHz, the 'Illinois State Emergency Radio Services Warning System'. Tests on this system are made at 10:00 AM on Tuesdays. In St. Louis County, such warnings are aired over a special school warning system on 155.865 MHz (KZC638). St. Clair County, Illinois, airs warning information on their Civil Defense channel 158.835 MHz (KSG935) tested daily at 10:15 AM, and their Hospital Net 155.280 MHz (KGR302) tested daily at 10:45 AM and 8:45 PM. St. Clair County also employes a direct radio link to the National Weather Service Ofice in St. Charles on 162.15 MHz (KBQ618) where urgent updates are given direct between civil defense and weather service staff.

Depending upon the urgency of the weather situation, the Missouri State Patrol may broadcast it on Point to Point (155.370 MHz) and call a net of all stations within a given troop area. Also, the local Hospital Association may call a similar net of the area hospitals in St. Louis County (155.28/155.34 MHz.).

Having been a trained Severe Weather Spotter for several years and present chairman of the St. Louis County Severe Weather Operations Net - a voluntary group of weather observers under the control of the Civil Preparedness Office, I have found these channels to be most interesting during inclement winter weather and severe spring and summer weather as well. I hope this discussion has been of interest to our readers as well, and would be pleased to provide further information to anyone desirous of same.

MIKE (MO-002)

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RETRACTION

DON (CT-003) writes to report that the "Boston Area Police Emergency Radio Network (BAPERN) article he submitted (Page 16 of the February 1979 Newsletter) is "outdated and inaccurate". The Newsletter was notified too late to prevent publication.

NORCOM - COOK COUNTY, ILLINOIS, COMMUNICATIONS SYSTEM

Edited Excerpt from Suburban Tribune, 10-4-78 (Illinois area):

> Thirteen north Cook County suburbs have launched an $880,000 communications system, Norcom, which is projected to be the model for an eventual countywide network of police communications.
>
> There is a proposal to link up the county's 126 communities in a vast police network. The expanded Norcom would have a countywide frequency and an emergency mutual aid frequency for north, west, and south suburbs.
>
> Norcom has the potential to link up the squad cars in every suburban community with computer banks of information from the FBI, Cook County state's attorney's office, Illinois Secretary of State's office, the Central States Law Enforcement Assistance Data Service, and local department files.

NORCOM shows up in the "Police Call Directory" as "North Regional Telecommunications Network", which is all in the 470 MHz UHF band. Other networks in the northwest, west, southwest, and south parts of Cook County use the 470 MHz UHF band. However, some of the networks still operate in the VHF high band. A quick glance at the "Police Call Directory" will show that frequencies in the 450-476 MHz UHF bands for the Chicago area are pretty well "eaten up" and that no extra frequencies in these bands will be readily available. Frequencies in the 476-512 MHz, UHF bands are not available, due to TV allocations.

This author's interpretation of the article implies that the proposed Cook County emergency frequencies will probably lie in the VHF Hi bands (NOTE: Original ISPERN radios have 4-channel capability, so a line-up of national, state, countywide, and regional emergency frequencies could be in order). Possible frequencies could include 155.250 - North, 155.190 - South, and 155.490 - West. (These frequencies were widely used in Cook County until the advent of 470 MHz UHF.) 155.640 has been pretty well phased out by the Cook County suburbs, but is still allocated to Cook County itself, as such, and could serve as the County-wide emergency frequency. Again, this author is only making an educated guess at frequency allocations.

JOHN (IL-012)

TWO-WAY RADIO AND BUS FLEETS

One of the more advanced transit agencies, Regional Transit of Sacramento, recently equipped its entire fleet of 240 buses with UHF radio. Basically, there are three methods of using the system.

By pushing a button on the control head, a driver may initiate routine communications with the dispatcher. These include in-service, out-of-service, and other routine messages. Up to four calls can be placed on hold when necessary.

More urgent communication is achieved by picking up the handset.

Also, a driver may activate a silent alarm by pushing a switch(which looks like a headlight dimmer)with his foot.

The computerized radio system features digital readout of unit numbers and bus routes. Drivers enter pre-programmed route information into the radio units with a rotary dial before going in-service. At any given time, the dispatcher can tell the approximate location of any bus without asking the driver for infomation. Also, the dispatcher can call any bus, a group, or all buses.

When the central dispatch office is shut down, communications are routed to a mobile dispatch car where supervisory personnel control the system. Truly, a very nice and worthwhile system.

BOB (CA-YO-001)

INFORMATION EXCHANGE

Anyone have a line on any of the following? (1) (Rok) Ambulance Service, Bellflower/Lakewood area - not listed in Police Call 1978. (2) International City Security Patrol, office located in Los Alamitos. (3) Any of the armored car services (Brinks, Loomis, etc.) (4) Long Beach Community Hospital Security. Many thanks. E.SANDERS (CA-LA-153), 5579 Langport Ave. No. 8, No. Long Beach, CA 90805

Would appreciate info on how to build an antenna matcher. ED (IL-004)

WANTED: Frequencies of Harbor Towing and Mesa Towing. JEFF (CA-OR-012)

Could anyone find out or confirm the availability, current sale price, and correct mailing for the publication mentioned in the June/July 1976 RCMA Newsletter, Page 4, entitled "The Railroad Frequency List". Also, can anyone give me up-dated information on the availability and source of the publication "Visiting Firemen" as mentioned in the January 1976 RCMA Newsletter? KEN PEHL (TX-003).

JOHN (CA-LA-055) -- please contact RICK (CA-RI-006) at 714-674-1157, 9 am - 6 pm.

In response to S.P. MANCHER'S letter (CA-LA-075), try the 460.900 to 461.000 band as this is allocated to Central Alarm Companies. You can listen to Morse Signal Systems on 460.925 and Wells Fargo Alarm on 461.000. RON (CA-LA-060).

I have 3,000 frequencies that include fire, police, rescue squads, NASA, FCC, FAA, taxis, highway crews -- you name it, I got it!! If anyone in New York State, New York City, Massachusetts, and the New Jersey Counties of Bergen, Essex, Hudson, Middlesex, Manmouth, Morris, Passaic, Sumerset, and Union need any frequencies, please let me know and I will send them any frequencies they want. ARTHUR WILLIAMS, JR. (NY-022), 576 Springtown Rd., New Paltz, NY 12561, 914-658-9467.

If you're interested in hearing the proceedings of the monthly RCMA meetings, send a blank 2-hour cassette tape to me. I will reproduce the tape and return it to you. Please state which monthly meeting you wish recorded. RICK ALDAY (CA-RI-006, P.O. Box 639, Elsinore, CA 92330.

WANTED: Plans and specs on radio desks and also pictures of radio room set-ups. GUY KROGER (IA-002), 211 S. Fawcett, Sioux City, Iowa 51103 (712) 258-5902.

Does anyone have information on the Cleveland National Forest numbering system? TIM (CA-OR-072).

In the LA/Orange Co. area, there seems to be little UHF repeater activity, except on 449.0 (Ham link-up to Arizona, New Mexico, and Texas). Both 449.0 and 449.25 are auto-patch. Can someone that is involved write to the Club Paper with info. Also, can some Ham compile a complete list of VHF-UHF repeater and simplex frequencies in So. Calif. and their use. Anyone have any "underground" programming info for an Opti-Scan? MARK (CA-OR-092).

New blind RCMA member needs taped bulletins -- Phone ABEL, 213-225-1055.

PROGRAMMING YOUR BC 250 TO RECEIVE & DISPLAY OUT-OF-BAND FREQUENCIES

ADVERTISED LIMITS	ACTUAL LIMITS
23.00-50.000 MHz	10.850-51.805 MHz
146.00-174.000 MHz	143.850-184.805 MHz
420.000-512.000 MHz	307.450-512.237 MHz

	ACTION	DISPLAY		DESCRIPTION
1.	Manual	50	454.000	Present channel & frequency
2.	./aux, store	50	454.000	Bulk erase 64 channel memory
3.	Manual	20	162.550	Select channel to perform operation
4.	-Delay			Remove time delay if present
5.	-Lockout			Remove lockout if present
6.	-149 Enter	20	149.000	Enter any frequency 146-174 MHz
7.	146 Limit	20	146.000	Sets lower search limit
8.	146.2 Limit	20	146.200	Sets higher search limit
9.	Adjust squelch at minimum setting for a quiet audio sound.			
10.	Store	0...0...0...		Starts searching between limits & stores found freq's or birdies in 64 channel memory system.
11.	Open & close squelch		146.01	Makes sure at least one frequency is stored in 64 channel memory system
12.	Recall	20	146.010	Stops search & verifies frequency in 64 channel memory system.
13.	Manual	20	149.000	Arms unit to accept new search limits.
14.	148 Limit	20	148.000	Sets new lower search limit
15.	150 Limit	20	150.000	Sets new upper search limit
16.	Recall	20	146.010	Displays frequency in 64 channel memory system (should be near lower limit of advertised band limit)
17.	Search Down	20	145.995	Starts searching below 146.000 MHz.
18.		20	145.830	Assume search stops at 145.830. To continue search, press search up or down. If 145.830 is to be entered in channel number 20, DO NOT PRESS Enter!!!! That would display "ERROR". Go to #19.
19.	Open Squelch	20	145.830	Prevents search starting again
20.	Do Not Touch Any Keys			Any keyboard entry now would require repeating steps 1-19.
21.	Turn radio off, then on again			145.830 is entered & can be scanned as any frequency found between 146-174.

	ACTION	DISPLAY		DESCRIPTION
22.	Manual	20	145.830	Radio returned to normal operation
23.	Manual	20	162.400	Stepped to next channel to start again.

To enter another frequency in this range (VHF high), REPEAT #'s 4,5,6, & 17-22. Speed changes search rate even in this mode. If search has passed desired area, search up is OK as long as you do not enter area between original search limits (146.000-146.200). As desired frequency is approached, open squelch and use search up or down to move one unit at a time (5 kc on VHF hi, 10 Kc on VHF Lo, 25 kc on UHF). Once initiated, searching outside stated coverage is continuous. Going down from VHF Hi, search will enter UHF at 512.237 and go down through 307.450. Then search will enter VHF Lo band at 51.805 and go down to 10.850 and then start over again at 184.805 in VHF Hi. Out of band frequencies will remain in unit until loss of power occurs.

Search can be started in UHF by using UHF frequencies in steps # 6, 7, 8, 14, 15. Search can be started in VHF Lo by using VHF Lo frequencies in same steps.

To search in any area of UHF band in 12½ kc steps instead of 25 kc steps as the unit comes from the factory, use UHF frequencies in steps # 6,7,8, and use VHF Hi frequencies in steps #14 and 15. To search in any area of the VHF Low band in 5 kc steps instead of the normal 10 kc steps, use VHF low frequencies in steps # 6,7,8, and use VHF High frequencies in steps #14, and 15. These smaller kc steps can be used anytime in any area of any band.

Improved squelch action may be obained by:

Add C117 from emitter of Q16 to ground in holes provided
Change R57 from 220Ω to 4.7K
Change R55 from 100K to 10K
Change R56 from 10K to 33K

These appear to have been done in Mfg. dates 7841 and later and it is definitely better.

R91 adjusts 5 KHz noise
R72 is low band tuning voltage offset.

On schematic drawing, correct "lo offset" to read Low Band T.V. offset.

Submitted by KARL (CA-OR-022)

ED NOTE: A similar program was also submitted by BOB (CA-YO-001), but the above appeared to be more extensive.

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News has been received that the California Department of Forestry will be administering the Needles, California, Fire Department on the Needles local government frequency 154.070 MHz (yellow) - Engines No. 31, 31A, and 31B.

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For those of you who monitor CHP purple (42.40 MHz) with a BC210, try using 42.405 to avoid the "birdie" on 42.40.

JEFF (CA-OR-012)

WANT ADS

FOR SALE:

Radio Shack PRO 5 UHF pocket scanner with earphone & rubber duck antenna. Never used. $75 or will trade for a VHF model pocket scanner. GARY SCHEINOHA (WI-002), Route 1, Box 28, Eden, WI 53019.

Radio Shack DX-300 Shortwave Receiver with digital readout. Like new - in perfect condition. $325 or best offer. STEVE HANDLER (IL-001), 3330 Old Mill Rd., Northbrook, IL 60062. (312) 433-2802 - days, or (312) 498-0838 - nites.

PANASONIC RF 2200 Short Wave Receiver, AM/FM, AC or Battery. $100 or best offer. PHIL (CA-OR-009), C/O P.O. Box 4563, Anaheim

REGENCY 8 ch VHF Hy/Lo A/C or D/C Model ACT-M8HL - $50.00; REALISTIC Pro 7B, 8 Ch VHF Hy band AC only - $50.00; REALISTIC Pro-12 4 Ch VHF hi-lo, DC only - Autoportable series w/case - $30.00. AC Converter for use at home - $10.00; REGENCY MR-33 VHF 20-band Tube Type - Tunable Radio - $30.00. RON MURRAY, 18935 Sherman Way, No. 12, Reseda, CA 91335 (213) 343-6645 - after 6 p.m.

SONY - ICF-6700 W Shortwave receiver, digital readout on AM, FM, and Shortwave bands. Only two months old - in excellent condition. STEVE HANDLER (IL-001), PO Box 48, Deerfield, IL 60015, (312) 433-2802 days; (312) 498-1403 (Nights).

PRO-3 - $100.00, KARL (CA-OR-022)

BEARCAT CRYSTALS: 146.940, 153.665, 154.785, 155.070, 155.130, 155.385, 155.445, 155.655, 155.715, 158.790 (2), 159.030, 163.925, 166.400, 167.200, 460.075, 460.175, 460.425, 460.475 - $1.50 each. CRYSTALS for scanners with 10.7 MHz IF: 158.790, 158.850, 159.030 - $1.50 each DAVID BECK (AL-001) 422 Laurie Drive, Birmingham, AL 35214.

WANTED:

WANTED TO BUY: A mobile mounting kit for a Bearcat 101 scanner, complete with the mounting bracket and the 12-110v power converter. Would like this in good operating condition. Contact DAVE MC LAREN (IL-002) RR # 2, County Line Rd., Rock Falls, ILL, 61071 or call (815) 626-5443 anytime.

TYPE 2 (Bearcat) Crystals, 154.600, 45.080. Call JEFF (CA-OR-012) (714) 642-4306.

TRADE:

Wish to trade Regency Tunables - Flight Monitoradio Model AR-136A 108-136 mc Aircraft and MR-10 Monitoradio Model MR 10B1, 152-174 mc FM for a Regency R-10. Or, will sell above for $35 each. JOHN (CA-OR-015)

COAST GUARD MONITORING

EDWARD (IL-004) mentioned the use by the Keokuk, IA Unit of the Coast Guard of Ch 22, 22A (Alpha) as referred to for marine information broadcasts. The information I am going to give is from LOCAL NOTICE TO MARINERS that I obtained at no charge from: COMMANDER (OAN), Second Coast Guard District,1430 Olive Street, St. Louis, MO 63103.

There are five Coast Guard Units controlling remote high level sites for VHF-FM coverage to mariners on the Western River:

Keokuk, IA - Unit covers Upper Mississippi and Illinois Rivers

Memphis, TN - Unit covers Lower Mississippi and Arkansas Rivers

Owensboro, KY - Unit covers Ohio, Monongahela, and Allegheny Rivers

Leavenworth, KS - Unit covers the Missouri River

Paris, TN - Unit covers Tennessee and Cumberland Rivers.

EAch high level site is capable of sending and receiving on Ch. 6 (156.3 MHz), 12 (156.6 MHz), 14 (156.7 MHz), 16 (156.8 MHz), 21 (157.05 Mhz), and 22A (157.1 MHz).

There are information broadcasts which are given on Ch. 22A at certain times. The Coast Guard Unit makes announcements of broadcasts going to be made on Ch. 16 prior to going to Ch. 22A. All times are given in local time.

FACILITY	BROADCAST TIMES	RIVERSTAGE TIMES
Group UM R *	1:15 am, 9:15 am & 5:15 pm	11:30 am
Group LM R Memphis, TN	3:10 am, 11:10 am & 7:10 pm	11:10 am & 3:10 am
Group OH R Owensboro, KY	9:00 am, 12:45 pm & 9:00 pm	10:00 am & 12:45 pm
Group MO R Leavenworth, KS	5:30 am, 1:30 pm & 9:30 pm	12:00 Noon
Group TN R Paris, TN	4:35 am, 12:35 pm & 8:35 pm	11:50 am

Then there are urgency and safety messages heard that are not scheduled, which can be given any time on Ch. 22A. Plus the use between the Coast Guard and boaters after initial contact is made on Ch. 16 for communications with the Coast Guard. Besides the Western River, there's information broadcasts for other Coast Guard Districts. A copy of the U.S. Coast Guard Marine Information Broadcast Schedules can be obtained free by writing: DEPARTMENT OF TRANSPORTATION, U.S. Coast Guard, Washington, DC 20590, which lists this information, or by writing to the District Office for the area you want.

WILLIAM (IL-007)

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TO ALL CANADIAN MEMBERS: I would like the opinion of Canadian members of RCMA on starting a Canada Chapter. If you would be interested, please contact me by mail or phone so we can see about forming a Chapter. Please send me your name, address, membership no. and phone no. BRIAN CORNISH, Apt. 22, Sigmond House, Newman Street, Saint John, New Brunswick, CAN E2K1X5, 506-693-8588 (Home) or 506-652-1000 (Work)

CORRESPONDENCE

I am responding to the recent letters on the subject of federal frequencies and have this point to add. Before the advent of programmable scanners, you had to work very hard to find the frequencies that you wanted. Secondly, if you ordered crystals, they came back stamped either "classified" or "out of frequency range". CA-RI-001 is right in the statement that the government offers frequency information on military, but try to find a book that lists Federal Frequencies (I know of one).

You can see why it is a sensitive topic. I have a few of the local frequencies, but I give them only to people that I can trust not to treat them wrong. I have only two people that fall into that group. Also, in the military aspect of the radio band, the books that are put out do not list the classified frequencies, so any sensitive frequencies are unlisted. If it is a back-up channel, it might be one not very often used. Also, if it is secret, then it is unlisted and scramblers and codes are used.

If OR-001 would like to discuss this any more, please contact me at the address below:

RICHARD WOLFE (MI-006)
P.O. Box 230108, Tigard, OR 97223
(new address)

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I received a letter from WI-1 and he has gotten a license plate WI-1 for his car (Wisconsin just started personalized plates). Has anyone in California gotten plates to match his membership?

I like the frequency lists you put in your Newsletter--they will be useful by members going on vacations, particularly with all of the programmable scanners now available. I know I will have a good time this summer, monitoring along the way to California. Last year I had to rely on Betty Bearcat (50% correct) and contact with members along the route (90% correct). The Bible of Frequencies were too confusing unless I had a 200-channel scanner. Thanks for this new feature.

If it wasn't for the Newsletter, I would never have been able to write to the other Wisconsin members that share my hobby.

ROBERT (WI-003)

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Greetings from Bermuda. I would like to express the joy I have found in being a member of the RCMA and in reading the monthly Newsletter, which has been a great help to me.

To tell you something of myself, my trade used to be an Electrician, but I am now employed with the Bermuda Telephone Company as a cable splicer, which I like very much. I am 24 years old and single. Radio monitoring is my best hobby, and I consider CB as my second best hobby. Speaking of CB, it may be of interest to RCMA members that CB signals travel here in Bermuda from as far away places as California, Vancouver, Italy, Germany, Canada, Newfoundland, and many other countries. Two-way conversations are held quite often--in some cases, a conversation may last as long as 30 minutes.

My monitoring receivers are: Realistic, Regency-Aircraft, and URR-35 Army Surplus. Most of my monitoring is on the aircraft band and local police and fire bands. Also, VHF marine is quite busy. There is very little activity, if any, on the UHF. Military use is on the normal public service band around 161 MHz. Most all government activity is carried out on VHF around 150 and 160 MHz.

DELWIN (BERMUDA-001)

BC-250 PROBLEMS

I am wondering if the problems we are having with the BC 250 are being duplicated elsewhere, i.e. poor UHF sensitivity, cricket-like noise on the VHF, loss of memory, fuzziness of audio on UHF and poor response from Bearcat. The Newspaper I work for purchased five, three of which have needed service. Two of the three have not been fixed by Bearcat. We are quite unhappy with them. However, if they would work, they might be great scanners. I do miss the individual lock-out switches for channel selection, though. Being able to work the unit by "feel" makes for much safer mobile use, especially when enroute to a fire.

THOMAS (FL-005)

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SATELLITE TV

CHRIS (CA-OR-050) writes to say that a new "earth station" has recently been constructed in the Laguna Nigueal area (So. Orange Co.). The system was installed by Hughes Aircaft, and the station is owned and operated by TM Communications. The Antenna is located on the site where TM's new office is planned to be built.

The antenna is directed at the "RCA SATCOM 1" and is capable of receiving up to 24 channels of video in the 4 GHz band. The received television programs are then microwaved to Santiago Pk, where they are then disseminated to TM's cable TV subscribers. TM Communications will mainly be using the channels associated with "Showtime" for broadcast of movies.

The RCA SATCOM 1 is a geostationary satellite located 22,300 miles above the Equator at 135 degrees west.

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ED (IL-004) says that he still uses his Regency DR-200 2-band tube type tunable and Midland (13-920) 3-band tunable. He indicates the Midland is as good as his crystal-controlled units for selectivity and sensitivity, although tuning is delicate but stable. This was his "track-em down" unit prior to the Bearcat synthesized units. He also commented (and sent photos) regarding police-type monitor receivers (multi channel and scanning crystal monitors and single-channel synthesized) made by Communications Coil Co. of Chicago, Ill, and used by various PD's and airlines.

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ELECTRA GETS A SECOND CHANCE

I've just been waiting for all of those nice reviews of the Bearcat 250 to come in. Now I can get even.

Upon receiving my BC250, I began to use my new machine. Almost as quickly as I would try a new feature, a new problem would crop up. So I packed it in the box, and it was off to the nearest Teledyne service center. When the Service Manager got to the part about "what seems to be the problem?", I merely smiled and handed him the three-page letter describing all seven of the major problems I had uncovered. He smiled back and stapled it to the repair form and sent it off.

To make a long story short, it took five weeks to get my BC 250 back. And two hours later it was back at Teledyne. Electra was a little quicker the second time around (only four weeks), but when I finally did receive the unit back, it worked perfectly. It would appear that even though my original product was obviously the victim of poor (non-existent?) quality control, Electra stood by its product and (finally) got it working OK. At least I'm not stuck with RONALD's (IL-009) "lemon syndrome". Thank you, Electra, but next time why not just build them right in the first place?

JEFF (CA-OR-012)

For BOB (KS-001) - Per Part 25.202b, 148.25, 154.2 and 450.0 mcs. are allocated for space telecommand and telemetering (plus the 136-138 and 400-406.1 bands). The band 149.9 to 150.05 is allocated to the navigation-satellite service, per pt. 2.106, plus on a secondary basis, any frequency between 460-470 mc. I wonder what you're listening to? Wideband transmissions are authorized between 406.4875-407.1125 and 416.4375-416.7625. If you're getting something elsewhere, check the reverse image.

For GUY (IA-002) - My radios are piled on any available flat surface within listening distance. Do you really want a picture of it??

For Stephen (NY-006) - The monthly list of Frequency Assignments to Government Radio Stations is, indeed, still classified Confidential, but presumably because of its military-national defense implications and if CRB Research's (S9 Magazine's?) "Top Secret Directory of ...etc" is like the rest of their stuff, forget it. But, I agree, that's why the intelligent discussion of these services by a responsible group of radio enthusiasts (the RCMA?) is of definite interest to me and presumably yourself and others.

G. DU BOIS (OR-001)

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On the Bearcat 250 that DON (CA-KE-001) mentioned to CHUCK (CA-OR-001) on out-of-band reception, a company called Communications Electronics advertises that with special programming techniques, the Bearcat 250 can monitor 125-146 MHz and 399-420 MHz. (ED NOTE: This involves adding 21.7 MHz (2X I.F. Freq.) to the desired out-of-band frequency and programming this "special" frequency into the radio.)

SAM's publishes a Scanner-Monitor Service Data Manual with an index in Volume 13.

You do not have to travel to an FCC office to check files on the public safety users. There is a way to have that information nearer to you, but this method does cost some unless you go by group sharing. You would need a microfiche viewer with a magnification of 48X. The FCC microfiche files listing can be obtained by writing: U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22151. The listing shows title, contents, and cost. They do not sell by area and only come as a complete set.

The Corps of Engineers for the Rock Island District on the Upper Mississippi River use the frequencies of 163.4125 and 165.0125 for communications. The 163.4125 sounds like a repeater output since communications between locks have been heard a distance away.

The Fire Department here in Rock Island, ILL (154.34 MHz) has an interesting code used when arriving at the location of a call. Code Green - nothing visible, Code Yellow - smoke visible, and Code Red - flames or fire showing.

The National Weather Service puts out a listing referred to as the NOAA Weather Radio list of operating stations, telling the location and which one of the three frequencies is used by each station. This list is up-dated periodically and a current list can be obtained by writing: NOAA, National Weather Service, 8060 13th Street, Silver Springs, MD 20910, Attn: W112.

Several scanner owners, myself included, and some Public Service Band users, have an interference source here. I am located about 4,000 feet away from the source, which is the transmitter antenna of the National Weather Service with their 24-hour weather service. The transmitter power out is 1,000 watts with an antenna gain of 9 db. So, for the scanner monitors, any information on improving receivers so as not to pick up transmissions other than those frequencies selected would be appreciated.

WILLIAM (IL-007)

Member WI-1 contacted me and provided answers to my questions about Minnesota State Patrol repeater traffic that I heard here in September. He also provided lots of details on law enforcement frequencies for Wisconsin State Patrol and County Sheriff's frequencies. Bob did a fine job in generating maps that would make excellent data sheets for members' files.

In the State of Indiana, 155.370 is the frequency used for severe weather and disaster warnings. Dispatches are made by the state police posts with tests scheduled for Monday mornings at 1000 local time.

In Indiana, 155.475 is known as "ILEEN" (Indiana Law Enforcement Emergency Network). In Wisconsin, 155.475 is known as "WISPERN" (Wisconsin State Patrol Emergency Radio Network). Lake Co. (Ill), SD transmitter KSA958 or KBW 410 has also made the changeover to 155.475 MHz.

"Illinois, State of" Transmitter KVK325 - using 39.800 and 39.460 MHz is now located at Hillside. Transmitter KZQ897, also using 39.800 and 39.460 and located at Rochelle, is a satellite or relay of Hillside and is connected via wire line. These transmitters are licensed to the Secretary of State for "investigator" dispatch. Mobiles answer on 42.760.

"Illinois, State of" base stations for the Department of Conservation can be found on 31.860 MHz. These bases are equipped to monitor incoming traffic from conservation units on 42.760 MHz.

Frequencies for the North Aurora Police Department radios are 155.610 (Repeater for Aurora PD) and 159.150 (Repeater for Kane Co. SD), ISPERN and the Village F.D.

JOHN (IL-012)

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UNHAPPY, IGNORED MEMBER QUITS!!

My membership has expired and you can feel free to give number OR-001 to someone else. I enjoy the newsletter, but I've offered input, as have others, only to be ignored. Maybe you should read some of the other radio clubs' newsletters and see what a club newsletter should be, instead of the offerings of an egotistical (self-serving?) group, who obviously don't give a damn about the out-of-state member. The sketchy meeting reports, the failure to follow through on many topics discussed, the bulk mailing rate, all indicate this. Your Federal Frequency policy, your skip policy (yes, it's there, every day!!), and your refusal to accept members columns, piss me off (substitute "irritate" if necessary) to the point where I would be better off dropping out.

G. DU BOIS, Ex-OR-001

p.s. Please print this in its entirety, or not at all, in which case I'll make sure plenty of members know about it.

ED NOTE: Glad you enjoyed the Newsletter! As to being ignored, I can't speak for the other staff members, but you were NOT ignored by this Editor. Everything given to me, from you, was used. As for the "others" being ignored, I would need more info. Regarding the "offerings" -- they came from the members who found time to participate. Out-of-stater's are less than 35% of the membership and have received proportional coverage in the Newsletter. Some of the other criticisms have some merit. The only excuse I can offer is that 3 or 4 people can't do everything. The bulk mailing rate saves members $2/yr. Maybe a first class option at $2 extra should be offered??!! I guess I'm guilty of "refusal to accept members columns". I just never got around to providing space for personal "columns", as I was just too darned busy trying to give the membership a Newsletter.

TECHNICAL CORRESPONDENCE

Regency Touch Comments

Last month I wrote the Technical Editor about my two Regencies overloading near the local Police Tower a couple of blocks away (the Bearcat 210 didn't). I have solved the problem. I didn't buy another Bearcat, but invested in a Regency Touch. Here is my analysis of the Touch. By the way, I have never read an evaluation of the Touch in your magazine -- have I missed it?? Here goes . . .

Fresh out of the box after 5 hours of listening, the unit developed a rumbling when transmissions were received. Another hour later it stopped scanning and lost all audio. The next day I exchanged it for another one and this scanner has been working very well.

Operation of this scanner is entirely different from the Bearcat 210, so forget everything you've ever learned on the operation of scanners and read the book. I ran a few tests with the Bearcat 210 and found that it was slightly more sensitive, but the Touch was more selective in not receiving any unwanted signals from pagers, planes, etc. The advantages of the Touch are: The unit has good sound, more channels (16), separate search, priority (this is the reason I bought it over another 210), easy programming, search stop, one antenna, and is very stylish. On the minus side, the 9volt battery life was short, bad sampling of the priority, poor instruction book, no 12-volt mobile mounting cord or bracket, and difficulty in knowing when a channel is "locked out". I went for days not knowing whether a channel was "locked out" because the unit scans so fast and the lights are so small that you can't really see if a channel is being skipped.

ROBERT (WI-003)

NEW RADIO CENTER FOR TENNESSEE HIGHWAY PATROL

The Tennessee Highway Patrol has adopted a new radio center to improve communications in the greater middle Tennessee area. Facts about this new system were in the latest edition of our own local newspaper, the Dickson County Herald. Below is a portion of this article (edited).

"A modern new communications center was put into service today for the 3rd district of the Tennessee Highway Patrol and officials say the system will improve communications in the 12 county area to as near 100% as possible. The facility, located at Nashville District Headquarters, replaces the old center which has been in operation since the early 1960's.

The twin console unit has eight separate frequencies compared to only four in the old system. This new system will increase range to about 100 miles. The new system serves units of the THP, TBI, Motor Vehicle Enforcement, Fire Marshal's Office, Public Service Commission, and the FBI."

JEFF (TN-001)

SCANNER RATING BY CONSUMER MAGAZINE

The Consumer Reports Magazine rated scanners as follows:

(In order from Good to Slightly Good)	(Judged Slightly Lower in Quality)
Bearcat 12	Bearcat 210
Lafayette 5B8	Fanon BM8A
Regency ACTE 106	Panasonic RE1800
Regency Touch	Realistic 2001
Sears 3675	Sears 3612

ROBERT (WI-003)

MONITORING AND THE LAW

BOB (CA-YO-001) has submitted the following excerpt from the Philadelphia, PA Code relating to Regulation of Conduct and Activity:

"10-817. Police and Fire Radio Broadcasts.

1. No unauthorized person shall intercept or interfere with any police or fire radio broadcast. No person shall manufacture, own, possess, sell or transfer any radio receiver or converter of any nature or type which is capable of receiving or interfering with police or fire radio broadcasts.

No person shall alter any radio receiver or converter in any manner so that the receiver or converter makes it possible to interfere with or receive police or fire radio broadcasts.

2. Confiscation. Any radio receiver capable of receiving police and fire radio broadcasts shall be presumed to be used for that purpose and any police officer is authorized to impound the receiver and hold it until the owner arranges for it to be re-equipped so that it will not be capable of receiving or interfering with police or fire radio broadcasts. If the owner does not make such arrangements within a period of thirty days, the receiver shall be destroyed.

3. Exemptions. Sections 10-817 (1) and (2) shall not apply to any law enforcement agency or any public news media.

4. Penalty. The penalty for violation of this section shall be a fine of not less than one hundred (100) dollars and not more than three hundred (300) dollars, together with imprisonment of not less than thirty nor more than ninety days."

BOB notes that this law relates to more than just mobile monitoring--simple possession can cost a violator a fortune. However, he notes that from personal experience, he has encountered no problems while monitoring within the city limits. Having a ham license doesn't help according to this law.

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DUE PROCESS? ? ?

The following is an actual even which I witnessed in September of 1975 while residing in Anaheim, CA. During the visit of President Ford, several persons, including myself, were monitoring the law enforcement activities involving the protection of the President.

A monitor listener, other than myself, was standing on the sidewalk in the 1500 block of Walnut Street in a small gathering. This person was monitoring Orange North, Red, Anaheim Green, and the simplex White channel. After about 45 minutes, the subject was confronted by an Anaheim police officer and asked what he was listening to. He replied that he was monitoring the above channels and nothing else on his Courier pocket scanner.

After consultation with his supervisor, the officer confiscated the radio and informed the subject that he could pick up his radio on the next workday in the property room of the police station. Needless to say, the person was very upset with the action taken by the police.

It might be argued that the above is a clear violation of due process. The subject was breaking no law and represented no threat to anyone. Where do we draw the line?

BOB (CA-YO-001)

THE "BIG ORANGE" -- A PROFILE OF PAMELA MC INNES

As Orange Countians creep down the freeways to work in the morning, they're under the watchful eye of a new "guardian angel," alias Pamela McInnes, KMPC radio's latest addition to its airwatch crew. The blonde former New Zealander is flying solo in a Cessna Cardinal, a single engine, four passenger plane for her shift each weekday. She was a traffic pilot for another Southern California station for two and one-half years before coming to KMPC.

Ms. McInnes began flying in 1972 and has a commerical license and instrament rating. She became an aviation ground school instructor at Van Nuys Airport and eventually was named the airport's director of flight marketing. "I've always had an interest in flying," she said, explaining that her uncle was chief pilot for British Airways. Her broadcast abilities grew from theater experience in New Zealand and film roles in Europe. She also worked as a news researcher for British Broadcasting Corporation television.

Her duties with KMPC are to fly around the Southern California freeway system and present traffic reports at 15 minute intervals during her two-hour shift. She shares use of the Cessna, dubbed "The Big Orange," with airwatch chief Herb Green for morning and afternoon flights. Helicopter pilot John McElhinney flies both shifts. The extra plane was added to allow full air coverage of Orange County traffic during both rush hours.

It's a busy job, she commented, trying to fly and listen to three or four different radios at once, including air traffic controllers, the KMPC intercom and CHP radio, among others. Before she hit the skies, she met with various tower controllers at airports so they would know who she is and what she's doing as she passes through their airspace while cruising the freeways. Although she has an instrament rating, which allows her to fly in poor weather, the station has set a limit of 1,500 foot cloud ceiling and three miles visibility for her aircraft. If weather goes below these minimums John McElhinney takes over her air duties from his helicopter.

Ms. McInnes still still makes reports those days, but from the stations new traffic information center, located in its newsroom. Six radio scanners, each able to monitor up to 50 frequencies each, (Bearcat 250's), pick up police, Highway Patrol and other agency reports, and a state Dept. of Transportation computer gives up to the minute freeway information. Besides giving general traffic reports, the pilot said that she and her colleagues are often able to help persons with problems on the road. If they see someone in difficulty and no one there to assist them, the pilots will call for assistance to be sent.

It's not only traffic problems they can spot. Fires are easy to be seen from above and they will call for trucks if none can be seen at the site or on the way. "You'd be surprised what you see up there," Ms. McInnes said. Her plane is quick and can get her from its base at Hollywood-Burbank Airport to Orange County in approximately 20 minutes. She commented that people think traffic pilots might miss things going fast, but from the air, it's eaiser to spot a problem far away and keep it in sight for awhile. Also, she can circle the scene as long as needed.

Her goal, she said, is to become the best traffic reporter. She added that she enjoys the job because it allows her to combine her love of flying, being in the broadcast field and performing a public service. She said that many people think of aviation in terms of only light planes and commerical airlines, but in reality, there are numerous types of flying jobs which men and women could enter. While she is in a minority-there are relatively few professional women pilots-she said she had no problem being accepted in her field. In fact, she added, the station she previously flew and broadcast for hired another woman to fill her position.

SUBMITTED BY DANNY (CA-OR-004)

As of 2/25/79, RCMA has 589 members in 43 states and 4 foreign countries.

ALABAMA 3
ARIZONA 5
ARKANSAS 1
CALIFORNIA ..374
COLORADO 4
CONNECTICUT ...4
DELAWARE 2
FLORIDA 9
GEORGIA 2
IDAHO 2
ILLINOIS 17
INDIANA 7
IOWA 4
KANSAS 2
KENTUCKY 1
LOUISIANA 2
MAINE 3
MARYLAND 8
MASSACHUSETTS ...9
MICHIGAN 8
MINNESOTA 2
MISSISSIPPI 1
MISSOURI 3
MONTANA 1
NEBRASKA 1
NEVADA 2
NEW HAMPSHIRE ...2
NEW JERSEY 13
NEW YORK 25
NORTH CAROLINA ..5
NORTH DAKOTA 1
OHIO 6
OKLAHOMA 1
OREGON 6
PENNSYLVANIA 12
RHODE ISLAND 1
SOUTH CAROLINA 2
TENNESSEE 1
TEXAS 6
VIRGINIA 6
WASHINGTON 1
WEST VIRGINIA 1
WISCONSIN 6
ARUBA,NETH ANTILLES..1
BERMUDA 1
CANADA 14
MEXICO 1

As of 2/25/79, RCMA has 374 members in 22 counties of California.

AL .. ALAMEDA 3
CC .. CONTRA COSTA 3
FR .. FRESNO 1
KE .. KERN 2
LA .. LOS ANGELES 167
ME .. MARIN 3
OR .. ORANGE 107
RI .. RIVERSIDE 21
SA .. SACRAMENTO 2
SB .. SAN BERNARDINO ..14
SC .. SANTA CLARA 3
SD .. SAN DIEGO 19
SF .. SAN FRANCISCO 1
SH .. SHASTA 1
SJ .. SAN JOAQUIN 1
SL .. SAN LUIS OBISPO 2
SM .. SAN MATEO 9
SO .. SOLANO 1
SR .. SANTA BARBARA 5
TU .. TULARE 1
VE .. VENTURA 7
YO .. YOLO 1

ADDRESS CHANGES

CA KE 002 Fred, Canoga Park, CA 91304
CA OR 077 David Silva, is now MA 008
CO 002 Philip Moldovan, 21st Signal Company, Ft. Richardson, AK 99505
ID 001 Mike Lussier, 80 W 400 N #6, Provo, UT 84601
NJ 006 Richard, West Caldwell, NJ 07006

DROPPED FROM MEMBERSHIP

CA LA 085 David Bielsker
CA LA 110 Richard Gise
CA OR 071 Charles Appel III
OR 001 George DuBois

NEW MEMBERS

CA LA 074 William Schruiff, 242 W Greystone, Monrovia, CA 91016
CA LA 085 Donald, El Segundo, CA 90245
CA LA 087 Russ Solomon, 6050 Buell, Bell Gardens, CA 90201
CA LA 110 Lyle Harper, 4350 Burns Ave #3, Los Angeles, CA 90029
CA LA 164 David Montano, 1466 N Soto Street, Los Angeles, CA 90033
CA LA 165 Leonard Ladieu, 11653 Walcroft Street, Lakewood, CA 90715
CA LA 166 Gerald, Los Angeles, CA 90057
CA LA 167 Donald Rowe, 16706 Citronia Street, Sepulveda, CA 91343
CA OR 021 John Lundgren, 1904 E Wilson, Orange, CA 92667
CA OR 071 Jimmy, Orange, CA 92669
CA OR 077 Frank DeSande, 1911 W Willow Ave, Anaheim, CA 92804
CA OR 108 Marc, Westminster, CA 92683
CA RI 020 Kenneth McMillin, 4545 Luther Street, Riverside, CA 92504
CA RI 021 John, Riverside, CA 92503
CA SB 014 William Mortimer, PO Box 1625, Wrightwood, CA 92397
CA SD 019 Robert Palmer, 8141 El Paseo Grande, La Jolla, CA 92037
CA SM 009 Gary Mondfrans, 713 Pepper Drive, San Bruno, CA
GA 002 Charles Wynn, 2915 Albany Street, Brunswick, GA 31520
IL 016 Bruce Barton, 7615 E Prairie Road, Skokie, IL 60076
IL 017 Raymond Sizemore, 411 N Monroe, Lincoln, IL 62656
IN 006 Dick Newman, PO Box 3205, Munster, IN 46321
IN 007 Arthur Gard, 1304 Good Court, Marion, IN 46952
LA 002 Denis, New Orleans, LA 70119
MA 009 Bill Brickley, 49 Elmwood Road, Needham, MA 02192
MD 008 Thomas Yingling, 221 Pinewood Road, Baltimore, MD 21222
MI 006 Peter Glass, 23328 Nona, Dearborn, MI 48124
ND 001 Dan Parkhurst, PO Box 607, Fargo, ND 58102
NJ 004 Dick Brodeur, 79 Laurel Drive, New Providence, NJ 07974
NJ 013 Jack Sheldon, 130 Mansion Ave, Voorhees, NJ 08043
NY 023 Larry Greene, RD #3, Box 440, Dansville, NY 14437
NY 024 Wallace Day, RFD #3, Route 9 South, Box 49, Plattsburgh, NY 12901
NY 025 Robert Foxworth, GPO Box A-866, New York, NY 10001
OH 006 Joseph Croy, 12020 Waterville-Swanton Road, Whitehouse, OH 43571
OR 007 Eugene, Portland, OR 97201
PA 012 Frank, Monessen, PA 15062
TX 006 J.J., Montgomery, TX 77356
WI 005 Larry Horn, 1917 N 15 Street, Sheboygan, WI 53081
WI 006 Tom Heiderer, 3888 S Hanson Ave, Milwaukee, WI 53207

PUBLICATIONS

BEHIND THE DIAL: Technical and frequency data--info on assignments, equipment, etc. 73 Magazine, Peterborough, NH 03458.

BEARCAT OPERATING FREQUENCIES: Local frequency guides in Zip Code groupings. FREE from the Electra Company. Write or call Betty Bearcat for free phone frequency info and lists.

CRB COMM DIRECTORIES: Local frequency guies and regional specialty listings. CRB Research, Inc. POB 56, Commack, NY 11725. $3.00 per copy for most lists, $4.00 & $5.00 for some; send SASE for catalog.

POLICE CALL: Radio Directories--regional volumes for public safety, etc. US Radio Data, Dept. W. Lebanon, NJ 08833. $4.95 per copy -- annual (9 vols. for 48 states; add $1.00 for mail order).

POLICE CALL: Southern California Detail Edition--local system/channel details. California Radio Communications Co. POB 35102, Los Angeles, CA 90035. $5.50 per copy -- annual.

RADIO WAVEGUIDE: San Diego Edition--local system/channel details. Scanner Master Co., 4265 35th St., San Diego, CA 92104. $6.25 per copy--annual.

* SCANNER MATE: Radio Directories--regional volumes for PS, trains, taxis, etc. Scanner Mate Directores, Inc., 172 High St., Hartford, CT 06103. $4.95 per copy--annual (7 vols. for 48 states; add $1.00 for mail order).

COMMUNICATIONS MONITORING AND COMMUNICATIONS PROJECTS, by Bob Grove to be released soon from Hayden Books.

A GUIDE TO VOICE SCRAMBLERS, Stock # 003-003-01735-5, Supt. of Documents, Washington, DC 20402. Price: $1.05.

** "SIGNAL 10-11: Manual for Monitoring the Calif. Hwy. Patrol--system/channel details.

* Per ED (IL-004), as of December 21, 1978, they are not publishing any more directories.

** Currently out-of-print.

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